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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,600	05/31/2001	Akira Arai	9319A-000222	8588

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EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,600

Applicant(s)

ARAI ET AL.

Examiner

John P. Sheehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 and 35-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 24-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1 to 14 and 24 to 34 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the inventions are so related to each other that an undue burden would not be placed on the Examiner by maintaining both groups of claims in a single application. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Further, to examine both sets of claims in the same application would require not only additional searching but also would require consideration of additional 112 issues, prior art, formulation of rejections, etc.

Claim Objections

2. Claims 8, 11, 28 and 31 are objected to because of the following informalities:

- I. In claim 8, line 2, it appears that "ceramics" should be --ceramic--.
- II. In claim 28, line 2, it appears that "ceramics" should be --ceramic--.
- III. Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation regarding the presence of a hard and soft magnetic phase appearing in dependent claim 11 is already recited in independent claim 1.

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IV. Claim 31 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation regarding the presence of a hard and soft magnetic phase appearing in dependent claim 31 is already recited in independent claim 3

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 to 14 and 24 to 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. Claim 1 is indefinite in view of the use of the phrase, “kind of rare earth” (lines 2 and 3). It is not clear what constitutes a “kind” of rare earth, that is, what makes one rare earth a different “kind” from another rare earth. This rejection can be overcome by deleting each occurrence of “kind of”.

II. Claim 1 is indefinite in view of the use of the phrase, “kind of element” (lines 3 and 4). It is not clear what constitutes a “kind” of element, that is, what makes one element a different “kind” from another element. This rejection can be overcome by deleting each occurrence of “kind of”.

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III. In claim 1, lines 6 and 7, the meaning of the phrase, “constituted from a composite structure” is not clear.

IV. In claim 1, lines 12 and 14, “*a* room temperature” (emphasis added by the Examiner) is indefinite. The use of “a” connotes more than one room temperature is available to choose from. This rejection can be obviated by deleting each occurrence of “a”.

V. In claim 2, lines 2 and 3, “*a* room temperature” (emphasis added by the Examiner) is indefinite. The use of “a” connotes more than one room temperature is available to choose from. This rejection can be obviated by deleting each occurrence of “a”.

VI. Claim 3 is indefinite in view of the use of the phrase, “kind of rare earth” (lines 2 and 3). It is not clear what constitutes a “kind” of rare earth, that is, what makes one rare earth a different “kind” from another rare earth. This rejection can be overcome by deleting each occurrence of “kind of”.

VII. Claim 3 is indefinite in view of the use of the phrase, “kind of element” (lines 3 and 4). It is not clear what constitutes a “kind” of element, that is, what makes one element a different “kind” from another element. This rejection can be overcome by deleting each occurrence of “kind of”.

VIII. In claim 3, lines 6 and 7, the meaning of the phrase, “constituted from a composite structure” is not clear.

IX. In claim 3, lines 12 and 14, “*a* room temperature” (emphasis added by the Examiner) is indefinite. The use of “a” connotes more than one room temperature is available to choose from. This rejection can be obviated by deleting each occurrence of “a”.

X. In claim 4, line 2, the use of the word “is” is indefinite in that it is unclear whether the claim is directed to a powder that has actually been produced by the recited process step or whether the claim is directed to a powder that is merely capable of being made by the recited process step. This rejection can be obviated by changing “is” to --has been--.

XI. In claim 6, line 2, the use of the word “is” is indefinite in that it is unclear whether the claim is directed to a powder that has actually been produced by the recited process step or whether the claim is directed to a powder that is merely capable of being made by the recited process step. This rejection can be obviated by changing “is” to --has been--.

XII. In claim 6, the last line “it” lacks a clear antecedent.

XIII. In claim 9, line 2, the metes and bounds of the term, “mainly” are not clear. The term “mainly” in claim 9, line 2 is a relative term that renders the claim indefinite. The term “mainly” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

XIV. In claim 10, line 2, “its” lacks a clear antecedent.

XV. In claim 11, line 2, the meaning of the phrase, “constituted from a composite structure” is not clear.

XVI. In claim 12, line 2, the use of the word “is” is indefinite in that it is unclear whether the claim is directed to a powder that has actually been produced by the recited process step or whether the claim is directed to a powder that is merely capable of being made by the recited process step. This rejection can be obviated by changing “is” to --has been--.

XVII. In claim 12, line 2, “its” lacks a clear antecedent.

XVIII. In claim 24, line 2, the use of the word "is" is indefinite in that it is unclear whether the claim is directed to a powder that has actually been produced by the recited process step or whether the claim is directed to a powder that is merely capable of being made by the recited process step. This rejection can be obviated by changing "is" to --has been--.

XIX. In claim 26, line 2, the use of the word "is" is indefinite in that it is unclear whether the claim is directed to a powder that has actually been produced by the recited process step or whether the claim is directed to a powder that is merely capable of being made by the recited process step. This rejection can be obviated by changing "is" to --has been--.

XX. In claim 26, line 4, "it" lacks a clear antecedent.

XXI. In claim 29, line 2, the metes and bounds of the term, "mainly" are not clear. The term "mainly" in claim 29, line 2 is a relative term that renders the claim indefinite. The term "mainly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

XXII. In claim 30, line 2, "its" lacks a clear antecedent.

XXIII. In claim 31, line 2, the meaning of the phrase, "constituted from a composite structure" is not clear.

XXIV. In claim 32, line 2, the use of the word "is" is indefinite in that it is unclear whether the claim is directed to a powder that has actually been produced by the recited process step or whether the claim is directed to a powder that is merely capable of being made by the recited process step. This rejection can be obviated by changing "is" to --has been--.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 to 14 and 24 to 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (Wang, cited by the applicants in the IDS submitted July 31, 2002).

Wang teaches a specific example alloy having a composition which, with the exception of the boron content, is completely encompassed by the instant claims (Abstract, line 1). Wang's alloy contains 4.58 at % boron while the instant claims require a minimum of 4.6 at% boron. Wang teaches that the alloy is a nanocomposite having a hard and a soft magnetic phase (Abstract). Wang teaches a method of making the disclosed alloy which is, similar if not, the same as applicants' method of making the claimed alloy composition (Wang, page 5097, under the heading "II. EXPERIMENTAL").

The claims and Wang differ in that Wang does not teach the boron content recited in the instant claims, is silent with respect to the magnetic properties recited in the instant claims and does not teach all the process limitations recited in the dependent product by process claims..

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the example alloy taught by Wang differs only in the B content (Wang's alloy contains 4.58 at% while the claims require 4.6 at%) and thus closely approximates the instantly claimed alloy composition and is so close that one would have

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expected that Wang's alloy and the claimed alloy to have the same properties, Titanium Metals v. Banner, 227 USPQ 773 and MPEP 2144.05. Further the process limitations recited in the instant dependent product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

4. Claims 1 to 14 and 24 to 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Panchanathan (Panchanathan, US Patent No. 5,72,792) or Mohri et al.(Mohri, US Patent No. 4,765,848).

Each of the references teaches a magnetic powder having a composition that overlaps the alloy composition recited in the instant claims (Panchanathan, column 1, lines 37 to 50 and Mohri, column 3, lines 30 to 42 and column 5, lines 5 to 30). Each of these references also teaches a process of making the disclosed magnetic powder that is similar to the process disclosed in the instant application (Panchanathan, column 2, lines 1-21 and Mohri, column 5, lines 45 to 50). Panchanathan teaches the presence of a hard and soft magnetic phase (column 1, lines 50 to 57).

The claims and the references differ in that the references do not teach the exact same alloy composition, are silent with respect to the claimed magnetic properties nor do the references teach the all the process limitations recited in the dependent claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the powder alloys taught by the references have compositions that overlap the alloy powder composition recited in the instant claims and therefore are considered to establish a prima facie case of obviousness, In re Malagari, 182 USPQ 549 and MPEP 2144.05. Further, in view of the fact that the alloys taught

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by Panchanathan and Mohri are made by a process which is similar to, if not the same as, applicants' process of making the instantly claimed alloy, the alloys taught by Panchanathan and Mohri would be expected to possess all the same properties as recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).” (emphasis added by the Examiner), see MPEP 2112.01.

With respect to the process limitations recited in the instant claims it is the Examiner's position that the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 to 14 and 24 to 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 14 and 23 to 33 of copending Application No. 09/875,789. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alloy compositions recited in these two sets of claims are exactly the same. The only difference in these two sets of claims is a difference in the claimed magnetic properties.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloys compositions in the two sets of claims are exactly the same and are made by the same process. In view of this, the claimed alloys would be expected to possess all the same properties, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).” see MPEP 2112.01.

7 This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1 to 14 and 24 to 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 13 and 16 to 22 of copending Application No. 09/863,072. Although the conflicting claims are not

identical, they are not patentably distinct from each other because the alloy compositions recited in each of these applications overlap when M is Dy in the instant set of claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1 to 14 and 24 to 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 12 and 18 of copending Application No. 09/754,823 and claims 1 to 10 and 14 of copending Application No. 09/754,463. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alloy compositions recited in each of these applications overlap when M is Nb in the instant set of claims..

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

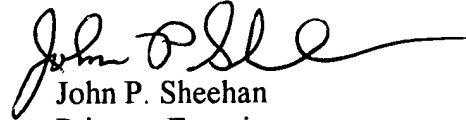
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



John P. Sheehan
Primary Examiner
Art Unit 1742

jps
September 20, 2002